

Amendments to the Claims

1. (Currently Amended) A method for determining the accuracy of keystroke entries of a string $k_1, k_2 \dots k_n$ entered into a field by a keyboard comprising the steps of:

providing instructions stored on a memory for assigning a score to a first of said keystrokes k_1 ;

providing instructions stored on a memory for assigning a score to succeeding keystrokes after k_1 based upon the time independent location of the keystroke in relation to another keystroke without regard to an amount of time associated with entering the keystrokes;

providing instructions stored on a memory for summing at least three of the scores of the keystrokes in the string to obtain a string score;

providing instructions stored on a memory for dividing the string score by the number of keystrokes used to determine the sum to obtain a normalized string score and; and

providing instructions stored on a memory for comparing the normalized, string score to a predetermined value of normalized string scores to determine the likelihood that the keystroke entries are accurate.

2. (Previously Presented) The method of claim 1, wherein the keystroke k_2 is immediately after the keystroke k_1 and each succeeding keystroke is provided with a score based upon its location in relation to a preceding keystroke.

3. (Previously Presented) The method of claim 1, wherein each keystroke's score after k_1 is based on its location in relation to the immediately preceding keystroke.

4. (Previously Presented) The method of claim 1, wherein there is at least two intervening keystrokes between keystrokes k_1 and k_n .

5. (Previously Presented) The method of claim 1, wherein the score of keystroke $k_2 \dots k_n$ is an whole number plus the least number of adjacent key spaces between keystrokes $k_1 \dots k_{n-1}$.

6. (Previously Presented) The method of claim 1, wherein the score of keystroke k_2 is based upon the linear distance between keystrokes k_1 and k_2 .

7. (Original) The method of claim 1, further comprising making a preliminary determination of a risk of fraud or error based upon the comparative value of the normalized string score to said predetermined value of normalized string scores.

8. (Original) The method of claim 1, further including calculating the normalized string scores for a plurality of strings, summing the normalized string scores to obtain a transactional score, and dividing the transactional score by the number of strings in the sum to obtain a normalized transactional score and determining accuracy based upon the value of the normalized transactional score in comparison to a predetermined value of normalized transactional scores.

9. (Original) The method of claim 1, further including adding an enhanced value to the score of a keystroke if the keystroke is shifted.

10. (Currently Amended) An apparatus for determining the accuracy of a string of keyboard entries in an online transaction by use of a keyboard including:

a processor; and

a memory coupled to said processor, said memory storing keystroke fraud instructions adapted to be executed by said processor to assign a score to a keystroke k_m based upon the time independent location of the keystroke-in relation to another keystroke k_n without regard to an amount of time associated with entering the keystrokes, to sum the scores of the keystrokes in a string entered on the keyboard to obtain a string score and to divide the sum of the keystroke scores by the number of keystrokes in the string to obtain a normalized string score and a means for comparing said normalized string score to a predetermined score to determine the accuracy of said keystroke entries.

11. (Original) The apparatus of claim 10 wherein said keystroke fraud instructions are further adapted to be executed by said processor to store in said memory an indication of the absence of accuracy associated with said string based upon said normalized string score in comparison to a range of said predetermined scores.

12. (Original) The apparatus of claim 10, wherein said keystroke fraud instructions are further adapted to be executed by said processor to calculate the accuracy of an online transaction entered by keystroke entries on a keyboard comprising summing the normalized string scores for a plurality of strings to obtain a transactional score, and dividing the sum of the

normalized string scores by the number of strings in the sum to obtain a normalized transactional score, whereby the normalized transactional score is compared to a predetermined score to determine the accuracy of the online transaction.

13. (Original) The apparatus of claim 12, wherein said keystroke fraud instructions are further adapted to be executed by said processor to store in said memory an indication of the absence of accuracy based upon said normalized transactional score.

14. (Original) The apparatus of claim 10, wherein said keystroke fraud instructions are further adapted to be executed by said processor to add an enhanced value to the score of certain of said keystrokes if said keystrokes are shifted.

15. (Currently Amended) A medium for storing instructions adapted to be executed by a processor to perform a method for determining the accuracy of entered keystrokes in a string of keystrokes in an online transaction performed by a keyboard, wherein said instructions comprise:

instructions for assigning a score to a keystroke k_m based upon the time independent location of the keystroke in relation to another keystroke k_n without regard to an amount of time associated with entering the keystrokes;

instructions for summing the scores of at least three of the keystrokes in the string to obtain a string score; and

instructions for dividing the sum of the keystroke scores by the number of keystrokes in the sum to obtain a normalized string score and comparing the same to a predetermined score to determine the probable accuracy of entered keystrokes.

16. (Original) The medium of claim 15, wherein the score of keystroke k_m is a whole number plus the least number of adjacent keys spaces between keystrokes k_m and k_n .

17. (Original) The medium of claim 16, wherein the score of keystroke k_m is based upon the linear distance between keystrokes k_m and k_n .

18. (Original) The medium of claim 15, wherein said instructions are further adapted to be executed by said processor to perform the method including calculating the normalized string scores for a plurality of strings, summing the normalized string scores to obtain a transactional score, and dividing the sum of the normalized string scores by the number of strings in the sum

to obtain a normalized transaction score and comparing the same to a predetermined score to determine the probability of error or fraud in said keystroke entries in said online transaction.

19. (Original) The medium of claim 18, wherein said instructions are further adapted to be executed by said processor to perform the method including determining a risk of fraud or error based upon the value of the normalized transactional score in comparison to one or more predetermined scores.

20. (Original) The medium of claim 15, wherein said instructions are further adapted to be executed by said processor to perform the method including adding an enhanced value to the score of keystroke k_m , if keystroke k_m is shifted.

21. (Currently Amended) A system for determining the probability of fraud or error in keystroke entries for an online transaction entered by keyboard, including:

means computer readable instructions on a memory for assigning a score to a keystroke k_m based upon the time independent location of the keystroke in relation to another keystroke k_n without regard to an amount of time associated with entering the keystrokes; and

means computer readable instructions on a memory for summing the scores of the keystrokes in a string to obtain a string score; and computer readable instructions on a memory means for dividing the sum of the keystroke scores by the number of keystrokes in the sum to obtain a normalized string score and comparing the same to a predetermined value indicative of possible fraud or error.

22. (Currently Amended) The system of claim 21, further including:

computer readable instructions on a memory means for calculating the normalized string scores for a plurality of strings;

computer readable instructions on a memory means for summing the normalized string scores to obtain a transactional score; and

computer readable instructions on a memory means for dividing the sum of the normalized string scores by the number of strings in the sum to obtain a normalized transactional score and comparing the same to a predetermined score indicative of possible fraud or error.

23. (Currently Amended) The system of claim 21, further including computer readable instructions on a memory~~means~~ for determining if a keystroke is shifted, and adding an enhanced value to the score of the keystroke if the keystroke is shifted.